

April 2014

Fire Injuries in Kansas

Injury Prevention and Disability Program



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EXECUTIVE SUMMARY

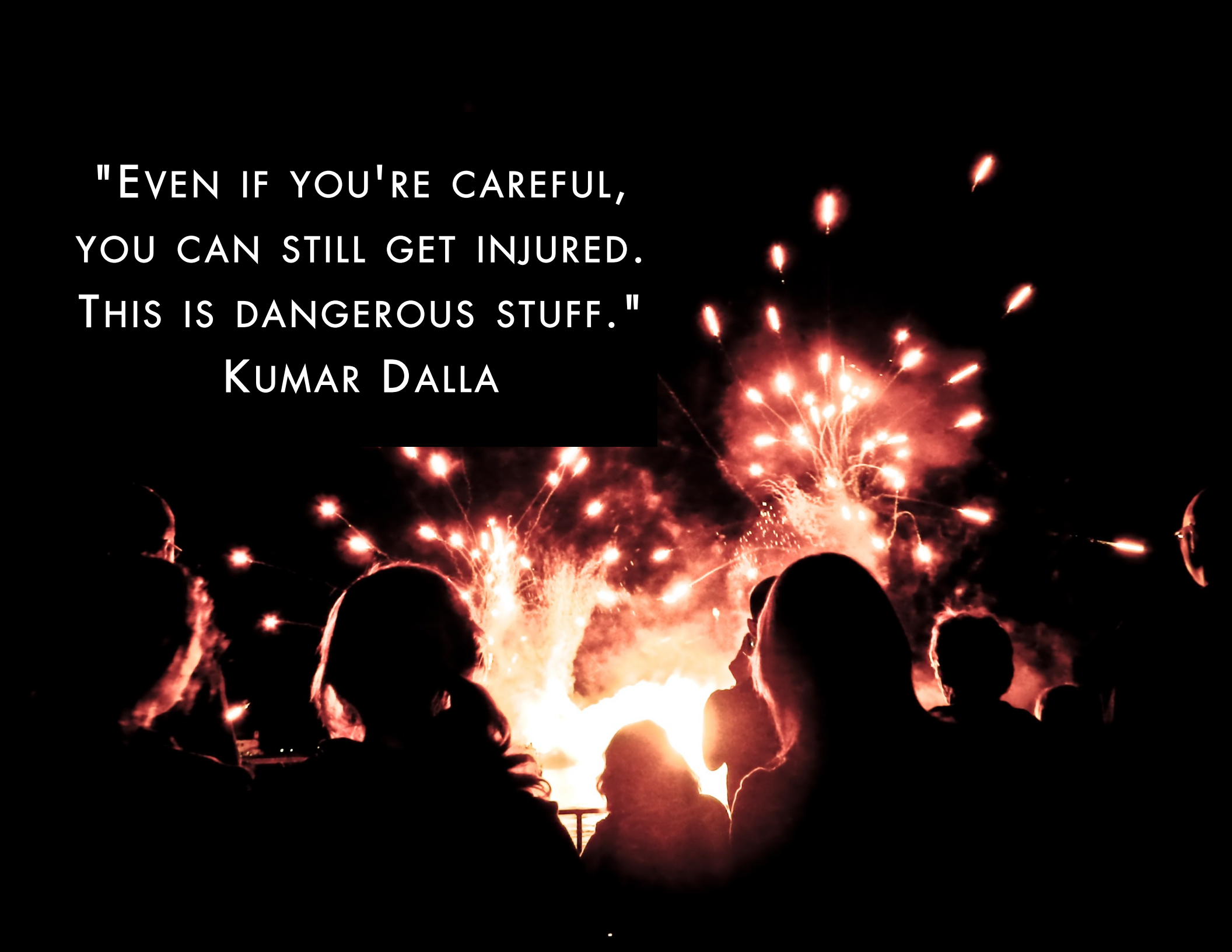
Fire and burn injuries affect all Kansans. Everyday Kansans are exposed to sources that can cause fire/burn injuries such as a stove, iron, household chemicals and gasoline. Another common cause of fire and burn injuries is fireworks. Fireworks injuries affect younger Kansans and can cause serious long term complications. There are six simple steps adults can follow to keep themselves and their children safe around fireworks.

Deaths due to fire/burn injuries differ from fireworks injuries, occurring most often in the winter and among older adults.

This report will describe how Kansans are affected by fire/burn injuries and highlight key prevention strategies.

"EVEN IF YOU'RE CAREFUL,
YOU CAN STILL GET INJURED.
THIS IS DANGEROUS STUFF."

KUMAR DALLA



INJURED GODDARD MAN: FIREWORKS “NOT WORTH THE THRILL”

Story reprinted with permission from The Wichita Eagle, original story available at <http://www.kansas.com/2012/07/21/v-print/2416112/injured-goddard-man-fireworks.html#storylink=cpy>

It was supposed to be the usual Fourth, with family fun and fireworks, for Brian Bean of Goddard.

Bean, 40, was celebrating Independence Day at home with his wife, two boys and other family members and friends. He was in charge of fireworks - as always. Around 9 p.m., he set up a few mortar tubes. He lit the first one and was reaching for the second one's fuse.

Then it happened.

The first mortar tube exploded almost instantaneously after Bean lit its fuse, without the usual few-seconds delay. The force blew Bean's hat off, separating it from its bill. The blast shot pieces of shrapnel deep into his skin and particles of gunpowder into his eyes. It burned his cheeks, eyes and forehead. It deafened him. And it blinded him.

"As soon as the thing exploded, I couldn't see," Bean said. "My eyes were so swollen. You physically had to

pry them open."

His family took him to the Wesley West clinic, at the corner of 13th and Tyler. From there, he went to Wichita Vision Institute, where he was seen by physician Reena Patel. She and physician Kumar Dalla ultimately treated Bean.

It was a busy night for the doctors.

"Between 6 p.m. and midnight I got called by 25 patients," Dalla said. "(They were injured by) every type of firework that you can imagine. Everything from regular sparklers to Roman candle, to mortar, to rocket."

Most of the patients were young men, but there also were a few children: a 3-year-old, a 4-year-old and a 5-year-old. The doctors spent the night doing eye surgeries.

Bean's eyes were still swollen shut when he reached the Vision Institute. He said his ears were ringing and everything hurt. On a scale of 1 to 10, he rated his pain a 10. Over the next two weeks, he would have three eye surgeries and plastic surgery. The pain would remain a 10.

Bean was always careful with fireworks. He stored them

properly, inspected them, checked the fuse, and even added fuse if he thought it wasn't long enough. He kept a bucket of water at hand every time he shot, and he taught his boys - an 8-year-old and a 5-year-old - to make sure the fireworks were out before throwing them in the trash.

This year, when his older son was allowed for the first time to shoot his own small, nonexplosive fireworks, Bean assisted him and explained every step.

Fireworks were Bean's thing - an amusement in which he invested thousands of dollars every year.

"It's my holiday. People know that, and they come to my house because they know," he said. "I take it seriously. I'm not careless with the fireworks."

There were about 70 calls on July 4 for injuries caused by fireworks, Wichita fire officials said. Physicians with the Via Christi emergency departments saw three cases of eye injuries caused by fireworks that day, according to spokeswoman Maria Loving. Wesley hospital saw six people with eye injuries, said spokeswoman Susan Burchill.

Of the people Dalla saw on the night of July 4, none was inebriated, he said. Most patients had experienced

accidents. Some happened because people thought the fireworks malfunctioned, when they were just slow to react.

Two of the patients - men ages 16 and 24 - had permanent loss of eyesight.

"What I want to emphasize is that," Dalla said. "Even if you're careful, you can still get injured. This is dangerous stuff."

People should know that fireworks are unpredictable, Bean said. You never know exactly how they're going to react once you light them up. Some of them are of bad quality - they won't go off, or they'll explode almost instantaneously after they are lit, like the mortar bomb that injured Bean.

He also thinks that sellers should be more responsible about who they sell the fireworks to and should give people more instructions on how to use them.

In other words, people might want to think about alternative ways to celebrate Independence Day, Bean said, "besides blowing ourselves up."

6 WAYS TO STAY SAFE ON THE FOURTH¹

1 Never allow young children to play with or ignite fireworks.

2 Always have an adult supervise fireworks activities.

3 Avoid buying fireworks packaged in brown paper, which often means they were made for professional displays and could be dangerous for consumers.

4 Make sure you, your kids, and others watch fireworks displays from a safe distance.

5 Call 911 immediately if someone is injured from fireworks.

6 Leave fireworks to professionals



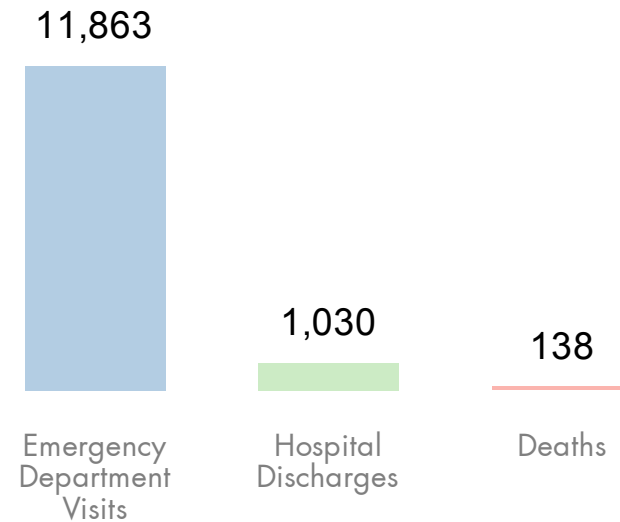
INTRODUCTION

Fire/burn injuries can happen at any time and can have negative consequences for communities and families. Ashes of once standing houses and buildings show the completely destructive nature of fire. When people think of fires they generally imagine firemen running into burning buildings and saving people, but fire and burns are a very broad injury area that includes injuries such as acid burns and scalds from hot water.

The least severe injuries are those that are hardest to measure. Common fire/burn injuries may be caused by touching a hot iron or spilling a hot liquid on one's hand. In most cases, these minor injuries are often treated at home and are not captured by existing injury surveillance systems such as emergency department, hospital discharge or vital statistics databases.

More serious injuries caused by boiling liquids or scalding burns require medical attention. Fire/burn deaths are often due to exploding gasses, conflagrations (out of control fires) and severe burns. The least severe injuries highlighted in this report are emergency department visits (EDV). More serious injuries are captured using hospital discharge (HD), which are longer stays in the hospital (24+ hours), and death data.

Fire/Burn related Events in KS, 2007-2010



Source: 2007-2010 Kansas Emergency Department Database & Hospital Discharge Database Kansas Hospital Association, 2007-2010 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE

In general, less serious injuries are much more common than serious injuries. This is also true of fire/burn injuries. From 2007-2010, there were 11,863 emergency department visits, 1,030 hospital discharges, and 138 deaths due to fire/burn injuries. These figures do not include the unknown number of injuries that are treated at home or by visiting clinics and urgent care centers.

Years of data included in this report are not the same across databases. Due to low counts, it was necessary to use five years of hospital discharge data (2007-2011) and 10 years for death data (2002-2011) to provide stable rates. Due to the large number of fire/burn emergency department visits, only four years of data were used (2007-2010). All the fire/burn events in this report are unintentional. Other types of fire/burn (suicide, homicide and other intent) are not included.



WHAT CAUSES FIRE/BURN INJURIES?

In general, burn injuries are more common than fire injuries. A burn involves a substance that comes into contact with the body. In a normal day, people are more likely to be exposed to objects that can cause burns such as hot water, chemicals, hot pans and hairdryers.

Much less time is spent near open flames. Fire injuries occur from uncontrolled fires, barbecues, kitchens and lighters. Suffocation injuries that resulted from the smoke of a fire are also included in the definition of fire injuries. Fire injuries are usually more serious resulting in extended care.

Data showed that for fire/burn emergency department visits a majority were burns (75.7%) and less than a quarter were fires (24.3%). Hospital discharges showed a more even distribution of fires and burn injuries (54.0% and 45.3% respectively). Deaths were almost all due to burns (95.2%). Due to the low number of fire injury deaths, subsequent analyses were limited to just burn injury deaths.

Distribution of Fire/Burn Injuries in Kansas by Gender



Sources: 2007-2010 Kansas Emergency Department Database & 2007-2011 Kansas Hospital Discharge Database, Kansas Hospital Association. 2002-2011 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE

Specific Causes: Further cause specificity is possible for both hospital discharges and emergency department visits. The leading cause of burn injury for emergency department visits was "Other hot substance or Object" (46.1%, n=273). These can be things such as hot pans, hairdryers and irons.

Among the more serious hospital discharge burn injuries the leading cause was "Burn caused by hot liquids and vapors, including steam" (46.1%, n=273). Fire injuries have much different specific causes. Among fire emergency department visits the leading cause was "Uncontrolled Fire" (24.3%, n=702). The leading cause of fire hospital discharge was "Highly flammable material" (39.2%, n=278), which includes materials such as gasoline and alcohol. A large number of emergency department visits were coded using a non-specific code "Other Fire" (41.4%, n=1,194).

Increasing specificity of coding in the future will help to better describe the source of fire/burn injury emergency department visits. Please see appendix for more detailed tables of causes of fire/burn injuries.



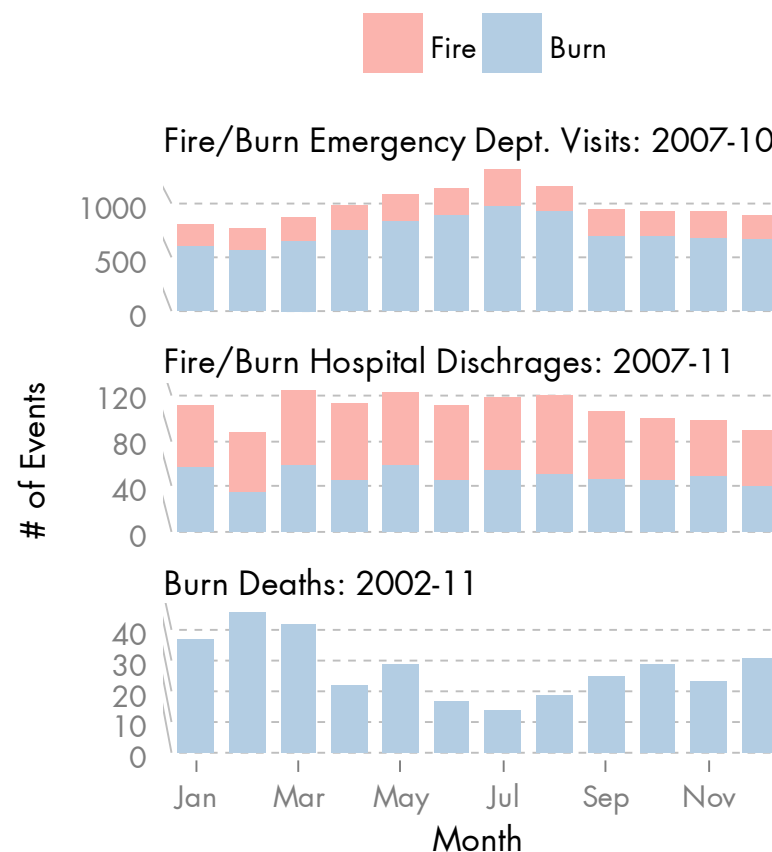
WHEN DO FIRE/BURN INJURIES OCCUR?

The number of fire/burn emergency department visits are not consistent throughout the year. There is an increase in fire/burn emergency department visits as the summer approaches. This is mainly driven by an increase in burns injuries rather than fire injuries. This steady increase going in to July is likely due to increase in use of fireworks.

The number of hospital discharges for both fire and burn injuries remains relatively stable throughout the year, which may point to less serious injuries on the fourth of July being captured by the emergency department visits database.

The seasonality of burn deaths is different than hospital discharges and emergency department visits. Burn deaths were more common in the beginning of the year, usually the coldest time of the year, and less frequent in the summer. These types of burn deaths could be related to heating issues in the home, particularly in manufactured or substandard homes.²

Kansas Burn/Fire Seasonality

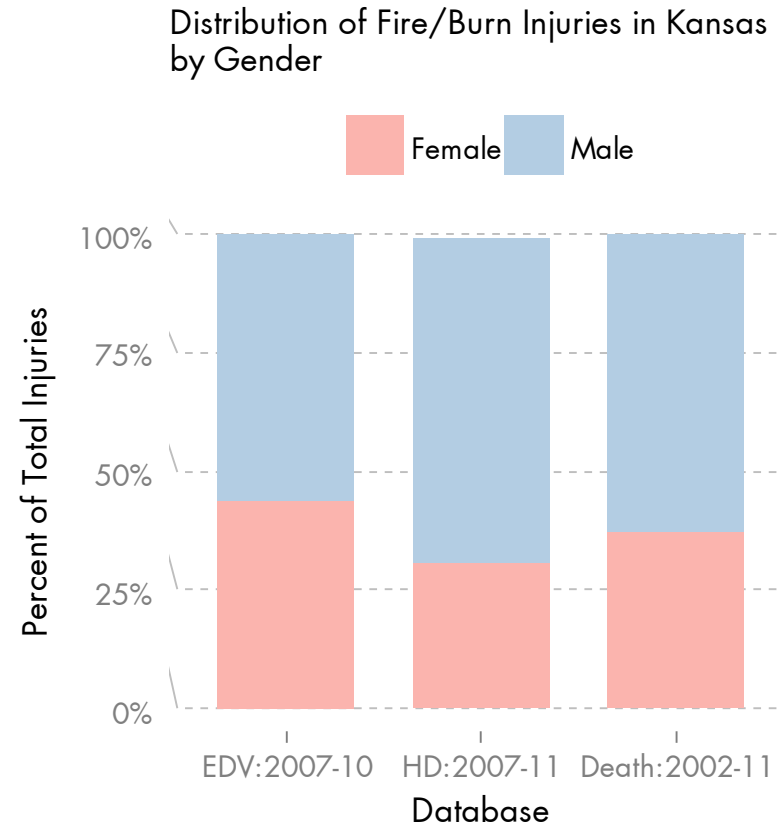


Sources: 2007-2010 Kansas Emergency Department Database & 2007-2011 Kansas Hospital Discharge Database, Kansas Hospital Association. 2002-2011 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE

WHO IS INJURED?

Note: All comparisons made in this section are significant unless stated otherwise. See Appendix for detailed tables and 95% confidence intervals.

Sex: Fire/Burn injuries were more common among men than women across two of three databases. Rates for fire/burn hospital discharges among males were twice as high as compared to females (68.8% vs 31.2%). Males also had a burn death rate that was two times higher than that of females (62.7% vs 37.3%). For fire/burn emergency department visits there was no significant difference in rates between gender groups (56.4% vs 43.6%).



Sources: 2007-2010 Kansas Emergency Department Database & 2007-2011 Kansas Hospital Discharge Database, Kansas Hospital Association. 2002-2011 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE

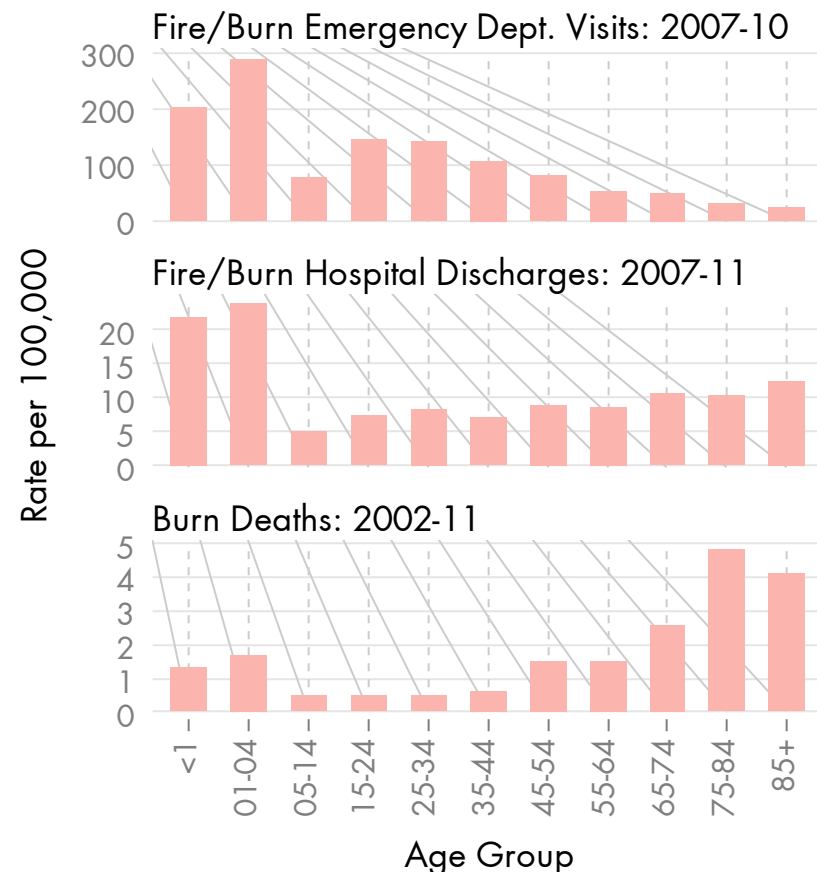
Age: Fire/burn injuries resulting in emergency department visits and hospital discharges were higher in children than in adults. Children 1 to 4 years old had the highest rate of fire/burn emergency department visits (289.7 per 100,000) compared to all other ages. This same age group had the highest rate of fire/burn hospital discharges (23.8 per 100,000) compared to all other ages, excluding those less than 1 compared to which they were not significantly different (21.9 per 100,000).

Higher rates of burn injuries in younger children reflect their elevated risk due to rarely having control over their environment or being able to understand or escape dangerous situations.³ In addition, parents may be more likely to seek treatment for their children following a fire/burn injury than adults would for themselves.

Deaths show a different story. Older adults 75 to 84 years old had the highest rate of burn deaths (4.8 per 100,000) as compared to all other ages, excluding those 85 years old and older compared to which they were not significantly different (4.1 per 100,000).

The United States Fire Marshall describes the elevated fire/burn injury risk among older adults as due to “mental and physical frailties, greater use of medications, and elevated likelihood of living in a poverty situation.”⁴

Age Specific Fire/Burn Rates Kansas

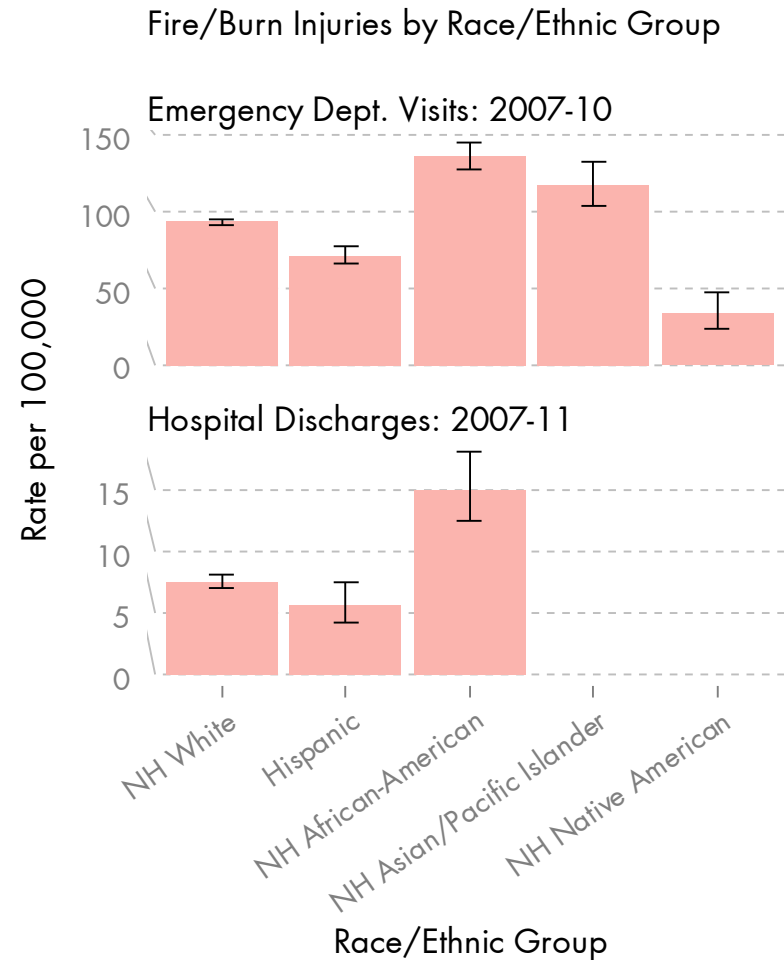


Sources: 2007-2010 Kansas Emergency Department Database & 2007-2011 Kansas Hospital Discharge Database, Kansas Hospital Association. 2002-2011 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE

Race/Ethnicity: Fire/burn emergency department visits differ across race/ethnicity groups. Non-Hispanic (NH) African Americans and NH Asian/Pacific Islanders have higher fire/burn emergency department visits rates as compared to NH whites and Hispanics.

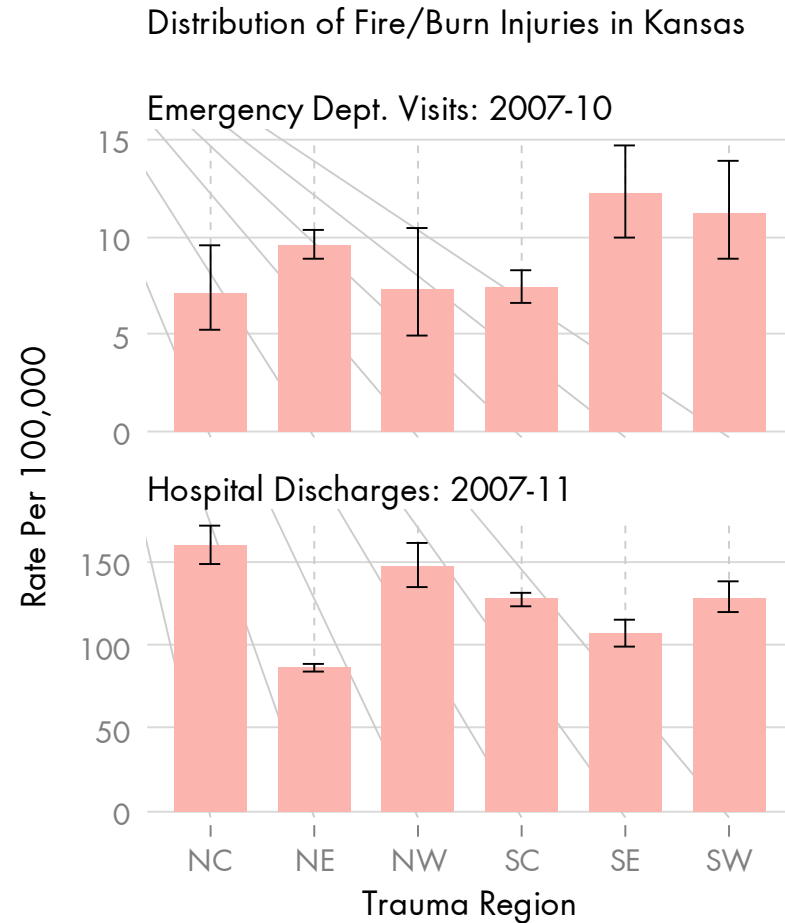
Non-Hispanic African-Americans also had the highest rate of fire/burn hospital discharges, as compared to other race/ethnicity groups. The fire/burn hospital discharges rate among NH African-Americans was twice as high as NH whites.

Notes on NH Asian/Pacific Islanders and Native Americans: NH Asian/Pacific Islanders across many injury topics have high emergency department visits rates because they sustain less severe injuries as compared to NH African-Americans and NH Whites, who have more serious injuries. Low fire/burn injury emergency department visit rates among NH Native Americans may be due to use of Indian Health Services (IHS) rather than Kansas Hospital Association hospitals; IHS data were not available for this report.



Sources: 2007-2010 Kansas Emergency Department Database & 2007-2011 Kansas Hospital Discharge Database, Kansas Hospital Association.

Trauma Region: Fire/burn emergency department visits varied by geographic areas within Kansas. The rates of fire/burn emergency department visits differed by Kansas Trauma Regions. The Northwest (NW) and North Central (NC) trauma regions were twice as high as compared to Northeast (NE) trauma region. The Southeast (SE) trauma region had a higher fire/burn hospital discharges rate as compared to the NC and South Central (SC) regions.



Sources: 2007-2010 Kansas Emergency Department Database & 2007-2011 Kansas Hospital Discharge Database, Kansas Hospital Association. 2002-2011 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics, KDHE

TECHNICAL NOTES

Cause Coding:

Hospital discharge data are selected and coded according to the *Consensus Recommendations for Using Hospital Discharge Data for Injury Surveillance* from the Safe States Alliance.⁵ Injury definitions are based on external cause of injury codes (e-codes) using the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) injury matrix recommended by the Centers for Disease Control and Prevention (CDC).⁶ Emergency department data is similar to hospital discharge but closely follows the selection method from State *Injury Indicators: Instructions for Preparing 2011 Data* from the CDC. Mortality data are coded using the International Classification of Diseases, 10th Revision (ICD-10) injury matrix recommended by the CDC. This is similar to the method described in *Instructions for Preparing 2011 Data* but uses a different coding scheme.

Hospital discharge data in this report may not match previously produced estimates. In 2012, the hospital database was updated to remove duplicate records. This may cause a shift in rates and counts. It is recommended not to compare data in this report with previously

released estimates for hospital discharge data.

Unintentional fire/burn ICD codes were defined as follows:

ICD-9CM:

Fire: E890.0-E899

Burn: E8924.0-.9

ICD-10:

Fire: X00-X09

Burn: X10-X19

Counts: Counts are the actual number of events that occurred. Counts below five are not displayed in this report.

Rates: Age-specific rates are calculated by dividing the number of events by the population in that specific age group. By using rates, two differently sized population subgroups (e.g. trauma regions) can be compared to each other. Note that rates in which the number of events is below 20 are not calculated as rates may be statistically unreliable.

Age-specific rates are calculated by dividing the number of events by the population of Kansas or by the Kansas subpopulation of interest. Population denominators are taken from estimates produced by the U.S. Census Bureau. To be consistent with other KHDE publications, 2000-2009 and 2011 midyear population estimates produced for each year are used, rather than using the most recent estimate. For example, a 2005 rate is based on the Kansas population estimate published in 2005 (2005 vintage), rather than using the most recent 2005 population estimate (2009 vintage). For 2001, the 2002 vintage estimates were used. For 2000 and 2010, the census 2000 and 2010 populations were used.

Age adjusted rates:

Age adjustment is a statistical method for standardizing rates for groups that have different underlying age distributions to be more comparable⁷. Age-adjusted rates should be used to compare Kansas with the United States as a whole, or for comparing two groups, or the same group over time, if the underlying population distribution is different or changes (for example, comparing rates for Hispanics and Non-Hispanics). Age-adjusted rates should be understood as relative estimates, not as actual measures of burden, and should not be compared to unadjusted rates.

All age-adjusted rates in this report are computed using the direct method. Briefly, rates are first computed within each age group stratum (i.e. age-specific rates). The products of each age-specific rate multiplied by the proportion of the 2000 U.S. Standard population in that age category are then summed across the age group strata. Age-specific rates are based on 11 age groups: <1, 1 to 4, 5 to 14, 15 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, 75 to 84 and 85 years and older.

Confidence intervals:

All rates and proportions presented in this report can be thought of as estimates of a theoretical true value, or population parameter. These estimates are subject to random variation. To characterize this variability, some of the statistics presented in this report include 95 percent confidence intervals. This interval can be thought of as a range of values that will contain the population parameter (theoretical true value) 95 percent of the time. To compute confidence intervals presented in this report, events were assumed to follow a Poisson distribution.⁸ If the number of events was 100 or higher, confidence limits were produced using the normal approximation. If the number of deaths or discharges was fewer than 100, limits are taken directly from the Poisson distribution. Age-

adjusted confidence intervals were calculated using the gamma method⁶.

Defining Race/Ethnic Groups:

Race Definition for Hospital Discharges analysis: Race was defined by combining race and ethnic group in the hospital discharge database. An individual was defined as Hispanic if they chose Hispanic as their ethnicity, regardless of race. Those who did not choose any ethnicity or chose 'Not Stated' were excluded from analysis. Of those remaining who chose non-Hispanic, the available race group was selected and concatenated with Non-Hispanic (NH). Race groups that were too small or had no population denominator were excluded. Excluded race groups include multi-racial, other, missing, unknown or patient refused.

Trauma Region

Trauma regions are defined by the Kansas Trauma Program. For more information on the current boundaries please visit www.kstrauma.org.

Databases:

The three databases used for the purposes of this

document are the emergency department database, the hospital discharge database, and the mortality database. See table on next page for detailed information on all three databases.

Database	Who's Counted?	Coding System Used	Years Provided In this Report
Emergency Department Database* Kansas Hospital Association**	A person who is admitted for less than 24 hours to a non-federal, short stay community or general hospital that reports emergency department visits to Kansas Hospital Association.	ICD-9CM	2007-10
Hospital Discharge Database* Kansas Hospital Association**	A person who is admitted for at least 24 hours to a non-federal, short stay community or general hospital that reports hospital discharge data to Kansas Hospital Association.	ICD-9CM	2007-11
Mortality Database Kansas Department of Health and Environment	Any persons who dies in the state of Kansas, and also Kansas residents who die outside of the state.	ICD-10	2002-11

*Unlinked Data: The records in the Kansas emergency department and hospital discharge database are not unique. Records are not unique when they are unlinked. For example, someone breaks their arm and goes to the emergency department but is then transferred to another emergency department due to a complication. In a linked system, this one event can be tied together and counted as one event but with an unlinked system these are counted as two separate events. Serious injuries can inflate the counts if the person is transferred more than once. This is why we refer to events as hospital discharges (not unique).

** Federal and specialty hospitals in Kansas do not report their discharges and emergency department visits to these databases. Not all non-federal, short stay community or general hospitals in Kansas report their emergency department visits or hospital discharge data to Kansas Hospital Association (KHA), therefore the KHA databases do not include 100 percent of emergency department visits and hospital discharges. In 2010, 127 Kansas hospitals reported their hospital discharge data to KHA; 99 Kansas hospitals also reported their emergency department visit data to KHA.

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Table 1. Fire/Burn Emergency Department Section Review Table Kansas 2007-2010

Demographic	EDV Count	EDV Rate*	95% CI	% of Total	Demographic	EDV Count	EDV Rate*	95% CI	% of Total
Overall	11,862	106.5	104.6-108.5	100.0%					
GENDER					RACE/ETHNICITY				
Female	5,171	94.3	91.8-97.0	43.6%	Hispanic	888	71.6	66.5-77.3	7.5%
Male	6,690	118.4	115.6-121.3	56.4%	NH African- American	1,041	136.1	127.7-145.1	8.8%
TYPE					NH Asian/Pacific Islander	330	117.6	104.5-132.9	2.8%
Burn	8,977	64.3	63.0-65.7	75.7%	NH Native American	40	33.9	24.1-48.2	0.3%
Fire	2,885	20.7	19.9-21.5	24.3%					
AGE GROUP (AGE SPECIFIC)					NH White	8,109	93.8	91.7-95.9	68.4%
<1	332	201.0	180.0-223.9	2.8%	TRAUMA REGION				
1-4	1,867	289.7	276.7-303.2	15.7%	North Central	754	160.0	148.6-172.1	6.4%
5-14	1,176	76.2	71.9-80.7	9.9%	Northeast	4,920	86.0	83.6-88.5	41.5%
15-24	2,383	144.1	138.4-150.0	20.1%	Northwest	495	147.4	134.3-161.6	4.2%
25-34	2,079	140.9	134.9-147.0	17.5%	South Central	4,167	127.4	123.5-131.4	35.1%
35-44	1,513	106.3	101.0-111.8	12.8%	Southeast	744	106.7	99.0-114.8	6.3%
45-54	1,297	79.9	75.6-84.3	10.9%	Southwest	782	128.4	119.5-137.9	6.6%
55-64	649	51.9	48.0-56.1	5.5%					
65-74	354	48.7	43.7-54.0	3.0%					
75-84	155	31.0	26.3-36.3	1.3%					
85+	57	23.5	17.8-30.4	0.5%					

Source: 2007-2010 Kansas Emergency Department Database, Kansas Hospital Association. All rates are age-adjusted unless otherwise noted.
 *Fire/burn EDV rate is per 100,000 population. Rates were age-adjusted to the U.S. 2000 Standard population using the direct method. See Technical Appendix for details on how rates were calculated.

Table 2. Fire/Burn Hospital Discharge Section Review Table Kansas 2007-2011

Demographic	HD Count	HD Rate*	95% CI	% of Total	Demographic	HD Count	HD Rate*	95% CI	% of Total
Overall	1,292	9.0	8.5-9.5	99.3%					
GENDER					RACE/ETHNICITY				
Female	403	5.5	4.9-6.0	31.0%	Hispanic	86	5.6	4.3-7.5	6.6%
Male	889	12.6	11.8-13.5	68.3%	NH African-American	136	15.1	12.6-18.1	10.5%
TYPE					NH Asian/Pacific Islander	8	-	-	0.6%
Burn	590	4.1	3.8-4.5	45.3%	NH Native American	5	-	-	0.4%
Fire	702	4.9	4.5-5.3	54.0%					
AGE GROUP (AGE SPECIFIC)					NH White	873	7.5	7.0-8.1	67.1%
<1	45	21.9	16.0-29.4	3.5%	TRAUMA REGION				
1-4	192	23.8	20.5-27.4	14.8%	North Central	47	7.1	5.2-9.6	3.6%
5-14	98	5	4.1-6.1	7.5%	Northeast	690	9.6	8.9-10.4	53.0%
15-24	154	7.5	6.3-8.7	11.8%	Northwest	33	7.3	4.9-10.5	2.5%
25-34	154	8.3	7.0-9.7	11.8%	South Central	317	7.4	6.6-8.3	24.4%
35-44	127	7.2	6.0-8.6	9.8%	Southeast	120	12.2	10.0-14.7	9.2%
45-54	182	9	7.7-10.4	14.0%	Southwest	85	11.2	8.9-13.9	6.5%
55-64	138	8.6	7.3-10.2	10.6%					
65-74	98	10.6	8.6-12.9	7.5%	Source: 2007-2011 Kansas Hospital Discharge Database, Kansas Hospital Association. All rates are age-adjusted unless otherwise noted. *Fire/burn EDV rate is per 100,000 population. Rates were age-adjusted to the U.S. 2000 Standard population using the direct method. See Technical Appendix for details on how rates were calculated.				
75-84	66	10.5	8.1-13.4	5.1%					
85+	38	12.5	8.8-17.1	2.9%					

Table 3. Mortality Database Section Review Table 2002-2011

Demographic	EDV Count	EDV Rate*	95% CI	% of Total
Total	351	1.2	1.1-1.4	100.0%
GENDER				
Female	131	0.8	0.7-1.0	37.3%
Male	220	1.6	1.4-1.9	62.7%
AGE GROUP (AGE SPECIFIC)				
<1	5	–	–	1.4%
1-4	26	1.7	1.1-2.4	7.4%
5-14	21	0.5	0.3-0.8	6.0%
15-24	20	0.5	0.3-0.7	5.7%
25-34	20	0.5	0.3-0.8	5.7%
35-44	23	0.6	0.4-0.9	6.6%
45-54	60	1.5	1.2-1.9	17.1%
55-64	44	1.5	1.1-2.0	12.5%
65-74	47	2.6	1.9-3.5	13.4%
75-84	61	4.8	3.7-6.2	17.4%
85+	24	4.1	2.6-6.1	6.8%

Source: 2002-2011 Kansas Vital Statistics, Bureau of Epidemiology and Public Health Informatics. *All rates are age-adjusted unless otherwise noted. Fire/Burn death rate is per 100,000 population. **95% CI are calculated around rate. Rates were age-adjusted to the U.S. 2000 Standard population using the direct method. See Technical Appendix for details on how rates were calculated.